ABSTRACT OF THE DISCLOSURE

In correcting the sound field, loudspeakers 6_{FL} to 6_{WF} are sounded by the noise. The attenuation factors of the inter-band attenuators ATF_{11} to ATF_{ki} for adjusting gains of the band-pass filters BPF_{11} to BPF_{ki} to the frequency in respective channels are corrected based on detection results of the reproduced sounds of the loudspeakers 6_{FL} to 6_{WF}. The attenuation factors of channel-to-channel attenuators ATG_1 to ATG_5 are corrected based on the detection results of the reproduced sounds of the loudspeakers 6_{FL} to 6_{WF}. The delay times of delay circuits DLY_1 to DLY_5 are corrected based on the detection results of the reproduced sounds of the loudspeakers 6_{FL} to 6_{WF}. The attenuation factor of a channel-to-channel attenuator ATG_k is corrected based on the detection result of the reproduced sound of the loudspeaker 6_{WF} as the subwoofer. Therefore, the levels of the reproduced sounds reproduced by the loundspeakers 6_{FL} to 6_{WF} are adjusted to be made flat over the audio frequency band.